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Nowa podrodzina, rodzaj i gatunek w rodzinie wyrynnikowatych *(Platypodidae, Coleoptera)*

Новое подсемейство, род и вид в семействе *Platypodidae (Coleoptera)*

A new subfamily, genus and species of the family *Platypodidae (Coleoptera)*

[Pl. IX—X]

Among the collections of the Polish Museum of Zoology there are entomological materials collected in 1938 by B. KRECZMER & A. FIEDLER in Madagascar. When looking through them I have found one beetle specimen of the family *Platypodidae* so much different from the genera grouped in this family, that it makes it necessary to establish not only a new genus but even quite a separate subfamily.

HOPKINS has classified into the superfamily *Scolytoidea* the *Scolytidae* and the *Platypodidae*. Ever since (1915) descriptions of new genera, as well as more precise morphological investigations of the hitherto known materials have brought so much novel information, that SCHEDL (3), being guided above all by the length ratio of particular tarsi joints, introduced in 1938 further two families: *Coptonotidae* and *Platytarsilidae*. He placed into the family *Scolytidae* all the genera having the first tarsi joint shorter than the 2nd, 3rd and 4th taken together.

The remaining three ones are characterized by their first tarsi

joint longer than the 2nd, 3rd and 4th taken together. This is why he has transferred the genus *Coptonotus* CHAP. from the family *Scolytidae*, to which it has belonged heretofore, to the new-created family *Coptonotidae*, where he has besides placed the genera *Scolytotarsus* SCHEDL and *Chapuisia* DUGÈS. SCHEDL assigns to the family *Platytarsilidae* the genera *Platytarsulus* SCHEDL and *Notoplatypus* LEA. He refers to the family *Platypodidae* the remaining genera, dividing them into six following tribes: *Platypodini* (with the genus *Platypus* HRBST.), *Tesserocerini* (with the genera: *Tesserocerus* SAUNDERS, *Tesseroplatypus* SCHEDL and *Tesserocranulus* SCHEDL), *Cenocephalini* (with the genera: *Cenocephalus* CHAP., *Mitosoma* CHAP. and *Symmerus* CHAP.[1]), *Crossotarsini* (with the genera: *Crossotarsus* CHAP., *Doliopygus* SCHEDL, *Mesoplatypus* STROHM., *Carchesiopygus* SCHEDL and *Triozastus* SCHEDL), *Periommatini* (with the genera: *Periommatus* CHAP., *Spathidicerus* CHAP. and *Tesserocephalus* SCHEDL) as well as *Diaporini* (with the genus *Diapus* CHAP.). Since the year 1938 there have been added two further genera: *Diacavus* SCHEDL (3) and *Mecopelmus* BLACKM. (4); the position of the latter has not yet been cleared up in the systematics.

The subfamily *Platypicerinae*, subfam. nov.

The beetle of the shape characteristic of the family *Platypodidae* [Pl. IX, fig. 1].

It differs from all hitherto known genera of the said family chiefly by the structure of its mouth parts, remarkable above all in the palpus of the maxilla and of the labium. In the genera described so far the joints of the maxillar palpus are either distinctly applanate, membranaceous (palpi membranacei), usually as long as the internal lobus, sometimes longer, or they are cylindrical but short, much broader than long, the first joint being the widest, the 2nd and 3rd gradually narrowed, so that the palpus is as long as the lobus or but slightly longer, and more chitinized (palpi coriacei).

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[1]) This name is preoccupied by *Symmerus* WALKER *(Diptera)*. Therefore, I propose a new name ***Chaetastus* nom. nov.** for *Symmerus* CHAPUIS 1866 nec *Symmerus* WALKER 1848, nomen praeoccupatum.

In the new subfamily the joints of the maxillar palpi are almost equal in length [Pl. IX, fig. 3], about three times longer than their basal breadth, the first and second joint somewhat swollen towards the extremity, while the third one is bluntish and gradually narrowed. The two terminal joints protrude beyond the external lobus and extend almost up to the anterior edge of the mandibulae (when closed). Both the lobi distinctly separated, the sharp-pointed external one is by a half longer than the internal lobus, the latter being semi-circular. Both with fairly long bristles along the edges. Labial palpi [Pl. IX, fig. 4] of a like slender structure, likewise 3-jointed, the first joint being the thickest and the longest, inflected in the middle; the second and third one are imperceptibly shorter and gradually slendering. The entire palpus longer than the mentum whose shape shows similarity with that observed in the genus *Mitosoma* CHAP. [Pl. IX, fig. 5], *Periommatus* CHAP. and *Tesserocerus* SAUNDERS. The labium is distinguished from that of the three mentioned genera by the following features: mentum shorter than palpi (in the quoted genera it is considerably longer), the palpal joints twice as long as broad (in the above mentioned genera the first two joints are broader than long, and the third is but slightly longer). The submentum also differs in its structure [Pl. IX, fig. 2] from that of the other genera. It is rather small, narrow, with sides parallel, its length being more than the double of the width, the anterior edge with an emargination for the mentum, the posterior one cuneately extends caudad, the submentum summit meeting the gular suture.

Noteworthy is SCHEDL's reluctance in applying the mouth parts structure not only for the key (which is well grounded, as the examination of mouth parts, often in individual specimens, is troublesome), but even when proving relationship. The features referred to are very characteristic (palpi and submentum structure), and at first sight remarkable even at a superficial examination of the beetle, making the dissection of mouth parts not indispensable. SCHEDL had probably been discouraged by STROHMEYER's (5) division of the *Platypodidae* into two subfamilies *(Platypodinae* and *Tesserocerinae)*, the characters reported by this author having proved insufficient for such a partition (the maxillar palpi conjointed and separated did not appear to be a constant feature). The palpi in the new genus finding no structural resemblance with any genus from among the family *Platypodidae* — the division into two subfamilies: the *Platypicerinae* and the *Platypodinae* seems to me well founded.

The key to the subfamilies is therefore the following:

A The maxillar palpi slender, with joints cylindrical, about three times longer than broad at their base, and protruding beyond the maxillar lobus by half of palpus length.

Subfamily *Platypicerinae*
(Genus *Platypicerus* gen. nov.)

AA. Maxillar palpi short, applanate, obliquely flattened, membranaceous particular joints low and flat; alternatively, the joints are short, cylindrical much broader than long, and the palpus is as a whole nearly equal in length to the internal lobus.

Subfamily *Platypodinae*
(The remaining, aforenamed genera).

Platypicerus gen. nov.

General features refer it to the members of the family *Platypodidae*, but the details of the structure are so very interesting, that they even show its alliance with such genera as, on the one hand, the Australian *Notoplatypus* LEA (from the family *Platytarsilidae)*, on the other, with the genus *Mitosoma* CHAP. from Madagascar and even, in some particulars with the South-American *Tesserocerus* SAUNDERS (both the latter genera belong to the *Platypodidae)*, or the *Chapuisia* DUGÈS from Mexico (family *Coptonotidae*).

Body narrow, slender, subcylindrical.

Head conspicuously protruding out of the pronotum; when viewed from above its outline is nearly rectangular. Front distinctly flattened, the summit of the flattened area being somewhat beneath the line which connects the upper eye margins [Pl. IX, fig. 6-the upper edge of the applanate front has been marked by a line]. There is a rather indistinct transition of the front into the vertex which is slightly convex and inclined forwards. Like in the genus *Notoplatypus* LEA [Pl. IX, fig. 7], the contiguity line of the front and the vertex lies exactly before the eyes [Pl. IX, fig. 7]. In the genus *Platypus* HRBST and *Crossotarsus* CHAP. this contiguity line runs high, almost vertically above the eye [Pl. IX, fig. 10]. In the Mexican genus *Chapuisia* DUGÈS the front and the vertex form a continually arcuate line. The head shape makes it possible to place the new genus both between *Notoplatypus* LEA and *Platypus* HRBST., or between *Chapuisia* DUGÈS and *Platypus* HRBST. [Pl. IX, fig. 7—10]. The head also shows resemblance with that of *Tesserocerus* SAUNDERS.

The eyes are oval, not very large, slightly surpassing the head outline [Pl. IX, fig. 1, 2, 6, 9]; their longer axis is parallel to that of the body, the eyes situated almost in the middle of both sides of the head.

Antennae with a small, suboval, remarkably depressed club [Pl. X, fig. 11], which answers SCHEDL's characteristic of the family *Platypodidae;* the entire club is beset with short pubescence (marked on the picture but partly), except for a small triangular area at the base, bare and subshining. The funiculus 4-jointed; the first two joints of same length, the third and fourth one shorter by almost a half. The first joint cask-shaped, while the second is in shape of a reversed cone, the third and the fourth ones lens-like. The second joint is the narrowest, the fourth the broadest of all (twice as wide as long). Scapus, commencing at the base, gradually swollens, becomming the thickest in the middle, thence narrowing towards the extremity.

Pronotum much longer than broad, with sides straight (when viewed from above), divergent towards the front, so that the maximal width of the pronotum is in its anterior $^1/_4$ [Pl. IX, fig. 1]. It is nearly flat longitudinally [Pl. IX, fig. 9], while transversally the pronotum is gently arcuate. Lateral borders well-defined, but not acute, do not reach the front margin [Pl. IX, fig. 9]. From above no emarginations are noted, in other genera so very characteristic, and due to a deep side recess that serves for hiding the strongly developed anterior femora. The prosternum slightly wedges between the coxae, without, however, separating them [Pl. IX, fig. 2]. The pleurae and the prosternum in their posterior portion shortened, owing to the emargination characteristic of the whole family.

Mesoscutum triangular [Pl. IX, fig. 1], scutellum invisible. Mesosternum plainly wedges between the coxae, extending up to their half and definitely separating them [Pl. IX, fig. 2], together with a narrow process of the mesosternum, projecting towards the front. Mesepimeron rectangular, like in the genus *Platypus* HRBST. [Pl. X, fig. 14].

Metasternum as long as the pro- and mesosternum taken together, faintly applanate in the middle; it enters between the coxae with two short teeth [Pl. IX, fig. 2]. Episternum long, with full width just behind the middle [Pl. X, fig. 11], posterior margin S-notched, while the posterior area is somewhat impressed inwards and forms, together with the concave portion of the metasternum,

a semicircular depression indicated in the picture with a spaced line. Posterior portion of the episternum with no spines often so characteristic of such genera as *Platypus* HRBST. and *Crossotarsus* CHAP. Epimeron invisible.

Elytrae long, broadest in the middle, distinctly truncated at their extremity; in the described specimen which is a female, the declivity is armed with two large processes. The elytrae sculpture fine, all the interstices smooth at the base, without asperities or any small transverse ridges. At the base of the 6th and 7th rows of punctures a well-defined humeral tubercle. [Pl. IX, fig. 1]. Pygidium concealed by the elytrae.

Abdomen shorter than the metasternum, the first segment entering with a broad process between the coxae, the second, third and fourth about the same in length, the fifth one short-ovate and the most flattened of all [Pl. IX, fig. 2].

Legs of I-st pair. [Pl. IX, fig. 2]. Strongly developed coxae are, like in all the family, irregularly bean-shaped and contiguous at their convex face. Trochanters not well-defined, femora broad with basal portion widest and somewhat depressed, with a trace of a furrow for hiding the tibiae. The tibiae are the most characteristic part of the anterior legs, their structure differing from that of the other genera. When viewed from above they look narrow, with, at their extremity, a long hook-like process bent outwards; the process is slender, long and sharp. Before it there is a single, large, flattened tooth, broad at the base [Pl. X, fig. 12]. Moreover, the external tibiae surface is armed with minute and bristly teeth, two of which, situated near the big tooth, are distinctly larger than the rest and blackened at the extremity [Pl. X, fig. 13]. All the joints of the tarsus cylindrical [Pl. X, fig. 12]; the first joint is the longest, the second and third almost equal in length, the fourth is the shortest, while the fifth one long and notably shorter than the first.

Legs of 2nd pair. Coxae globose, their internal face convex, while the external is concave. They are distinctly but not widely separated. The trochanters triangular. Femora not so strongly developed as those of the 1st pair, but likewise flattened, their extreme portion being the broadest, with a well indicated furrow for the tibiae. The latter [Pl. X, fig. 15] distally widened, at the inner angle digitate and rather narrowly extended. They are longitudinally depressed and on their external face sparsely beset with small teeth; before their extremity, a fairly distinct, transversal and

slightly arcuate ridge is to be noted. The tarsi structure similar to that of the first pair.

Legs of 3rd pair. Coxae farther off each other than in the intermediate pair, rounded at the femoral base, sharply extended sideways and contiguous with the episternum extremity. Trochanters trapeziform. Femora, tibiae and tarsi of similar structure to that of the 2nd pair. A distinct hair fringe at the first joint of the tarsus.

Platypicerus hamatus sp. n.

Female. Length 7,8 mm; breadth 1,5 mm.

Coloration rather uniform, brown, of about the same shade both at the upper and the lower part of the body; darkened is only the posterior portion of the elytrae, chiefly on the declivity, where the asperities are pitchy brown.

Pubescence scanty, short, golden-yellowish, most distinct on the anterior cephalic area and over the declivity. The pubescence is dense on the front, erect and progressively scarcer on the vertex, leaving the posterior vertex part entirely bare. On the lower part of the head, just behind the base of the mandibulae there are scarce adherent hairs, disposed transversally to the body axis; they are better visible when specially illuminated [Pl. IX, fig. 9]. On the pronotum, both at the anterior and posterior margins, a row of thin hairs is to be noted, but not so discernible as that in *Platypus* HRBST. or *Crossotarsus* CHAP. On the prosternum, between the coxae and its anterior edge there are two subcircular sets of hairs. The top part of the elytrae almost bare, with, here and there, a single hair jutting out; the declivity itself is distinctly hairy, the same as the processes and the sides of the elytrae in their extreme one fourth. Epimera as well as the sides of the metasternum are distinctly beset with thin hair-growth, rather sparse, particularly so in the middle of the metasternum. The abdominal segment provided with a sparse hair-fringe along the posterior margin. Bristly is, likewise, the external face of the tibiae.

The sculpture is fine, both at the upper body part and below; thanks to that the beetle has a fairly strong shine.

The epistoma looks like a tucked up fold [Pl. IX, fig. 6]; this fold, the thickest in the middle, is connected sideways with the swollen brink surrounding the antennae base from ahead. The front

is level, half-mat, punctured, within each puncture a bristle pointing vertically. There is a small roundish pit above the episternum, situated centrally at the front bottom. The transition from the front into the vertex rather indistinct. The vertex shiny, irregularly and sparsely punctured; towards the anterior margin of the pronotum the punctures become gradually scarcer and smaller. Running along the median line of the vertex is a darkened, little, concave furrow, before which, located right above the transition of the front into the vertex, is a minute concavity, more densely and thickly punctured. Tempora almost impunctate. Pronotum shining with, on a very finely punctured background, sparsely interposed larger, oblong punctures, which are more thickly disposed all over the sides and the posterior pronotum angles. At the basal half of the latter there is a narrow, little stria extending almost up to the middle of pronotum; the two very shallow streaks commencing at the anterior extremity of the said stria and running towards the front are V-shaped; they are better visible by a side light. The anterior margin of the pronotum is imperceptibly extended towards the front, while the posterior one is feebly bisinuate.

Elytrae smooth, shining, marked with irregular rows of oblong punctures [Pl. X, fig. 17]. Towards the declivity the rows are slightly divergent, the punctures becoming gradually smaller on the outer rows. The rows are not impressed. The suture conspicuously and narrowly depressed along its basal one third. The 1st and 2nd interstices almost equally broad, the 3rd one definitely wider, the widest of them all. The interstices very finely punctate, the punctures decreasing in size towards the base of the elytrae and arranged very sparsely on the elytrae. The lateral edge of the elytrae tucked down, grooved, expanding caudad at the level of the episternum extremity, and at the posterior area becoming twice as broad as at the base.

Elytrae truncate obliquely, inclined at an angle of 45^0, with all around them a well-defined brink, most noticeable in its upper part. The brink is ridge-like, interrupted above at the suture and less protruding at the sides of the declivity; the ridge is uneven, with a marked tooth situated between the 1st and 2nd interstices. The declivity itself, when viewed from behind, looks round; in its upper part, above the processes it is roughly punctate and bristly; beneath them the declivity is smooth, shiny and on both the elytrae impressed above their posterior margin. The suture on the declivity imperceptibly elevated with, on both sides of its upper part, a fringe of

bristles. The posterior margin of the elytrae with a well-marked lateral angle [Pl. IX, fig. 2] is slightly curved caudad at the suture. Both the large processes on the declivity are situated a little beneath its middle (in lateral view) and their base is large [Pl. IX, fig. 2]. The extreme portion of the processes is obliquely truncated at the top and bends inwards. The outer edge with an angulate flexure at its length half has an indistinct tooth, or rather tubercle.

Other characters are given in the description of the genus and the subfamily.

Holotype: Central Madagascar, district Moramanga, Périnet, 24 I 1938; taken in a forest. In the collection of the Polish Museum of Zoology, Warsaw.

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EXPLANATION OF PLATES

PLATE IX

Fig. 1. *Platypicerus hamatus* sp. n. Female from above, × 13
Fig. 2. *Platypicerus hamatus* sp. n. Female from below, × 13
Fig. 3. *Platypicerus hamatus* sp. n. Left maxilla, × 38
Fig. 4. *Platypicerus hamatus* sp. n. Lower labium, × 38
Fig. 5. *Mitosoma* sp. Lower labium, according to STROHMEYER (5)
Fig. 6. *Platypicerus hamatus* sp. n. Head in frontal view, × 25

Fig. 7. *Notoplatypus elongatus* LEA. Head in lateral view, according to SCHEDL (2)
Fig. 8. *Chapuisia mexicana* DUGÈS. Head in lateral view, according to STROHMEYER (6)
Fig. 9. *Platypicerus hamatus* sp. n. Head and pronotum in lateral view, × 13
Fig. 10. *Platypus cylindrus* L. Head in lateral view, × 13

PLATE X

Fig. 11. *Platypicerus hamatus* sp. n. Antenna × 37
Fig. 12. *Platypicerus hamatus* sp. n. Tarsus and tibia of 1st pair of legs, from above, × 42
Fig. 13. *Platypicerus hamatus* sp. n. Tibia of 1-st pair of legs, in lateral view × 42
Fig. 14. *Platypicerus hamatus* sp. n. Episternum of the metathorax, × 17
Fig. 15. *Platypicerus hamatus* sp. n. Tibia of 2nd pair of legs, in lateral view, × 42
Fig. 16. *Platypicerus hamatus* sp. n. Declivity of the elytra, in lateral view, × 42
Fig. 17. *Platypicerus hamatus* sp. n. Left elytra sculpture, indicated with a square on Pl. IX, fig. 1, × 50
Fig. 18. *Platypicerus hamatus* sp. n. Tibia of 3 rd pair of legs, in lateral view, x 42.

STRESZCZENIE

Autor podaje opis nowego rodzaju i gatunku madagaskarskiego, który budową narządu pyszczkowego i przednich nóg tak wybitnie różni się od innych rodzajów z rodziny *Platypodidae*, że uważa za stosowne wprowadzenie podziału tej rodziny na dwie podrodziny: *Platypicerinae* i *Platypodinae*. W narządzie pyszczkowym najistotniejsze cechy dotyczą budowy głaszczków żuchw i wargi dolnej, oraz brody i podbródka. Golenie I-ej pary nóg są zakończone mocnym hakiem wygiętym na zewnątrz, a na bocznej powierzchni goleni znajduje się jeden silny ząb i parę drobnych ziarenek. Nowy rodzaj jest jakby ogniwem łączącym australijski rodzaj *Notoplatypus* LEA z madagaskarskim rodzajem *Mitosoma* CHAP., a nawet z południowo-amerykańskim *Tesserocerus* SAUNDERS.

Poza tym autor proponuje nową nazwę *Chaetastus* nom. nov. dla *Symmerus* CHAPUIS 1866 nec *Symmerus* WALKER 1848, nomen praeoccupatum.

РЕЗЮМЕ

Автор описывает новый род и вид, который строением ротовых органов и передних ног так отличается от других представителей семейства *Platypodidae*, что автор считает необходимым

разделить это семейство на два подсемейства: *Platypicerinae* и *Platypodinae.*

Формы челюстных и губных щупиков, подбородка и подподбородка, являются самыми существенными признаками в ротовых органах. Голени первой пары ног закончены крепким крюком изогнутым снаружи, а на их боковой поверхности находится сильный зуб и несколько мелких бугорков.

Новый род является как-бы звеном соединяющим австралийский род *Notoplatypus* LEA. с мадагаскарским родом *Mitosoma* CHAP., а даже с южно-американским *Tesserocerus* SAUNDERS.

Затем автор предлагает новое название *Chaetastus* nom. nov. для *Symmerus* CHAPUIS 1866 nec *Symmerus* WALKER 1848, nomen praeoccupatum.

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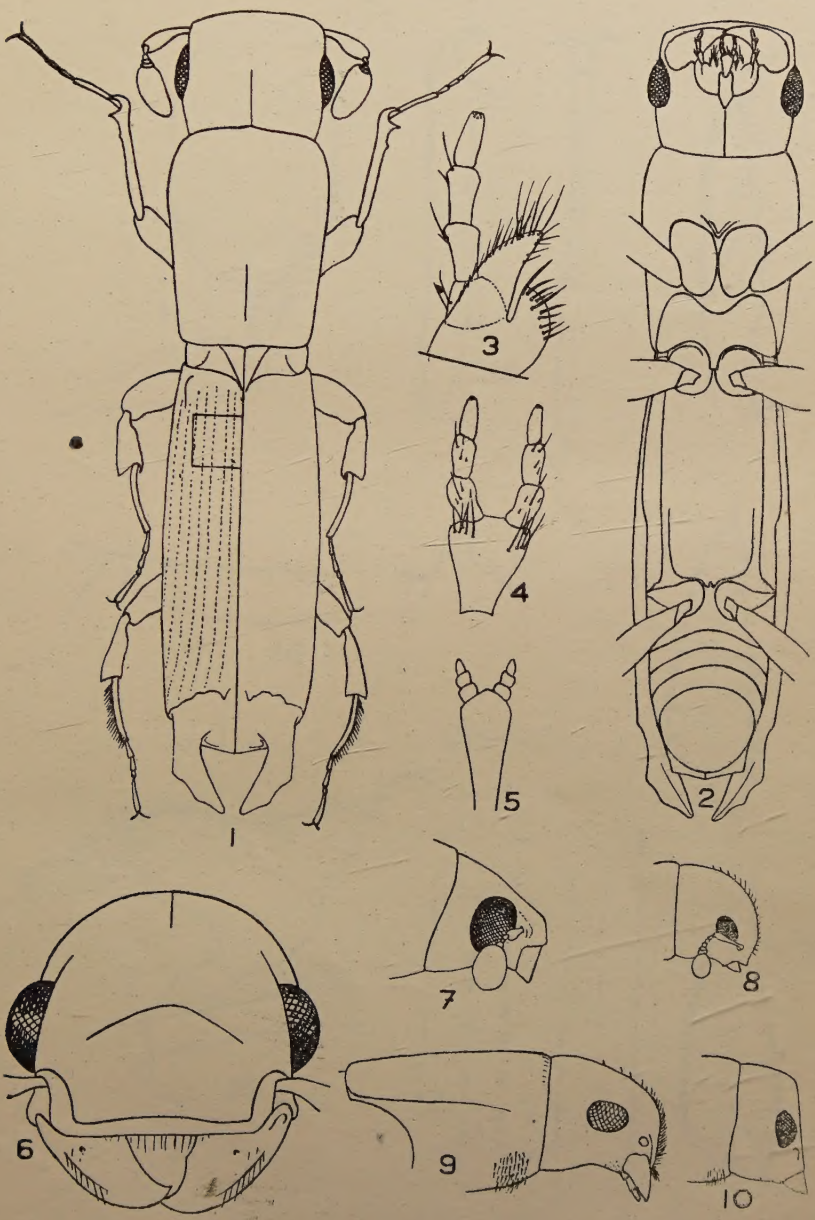

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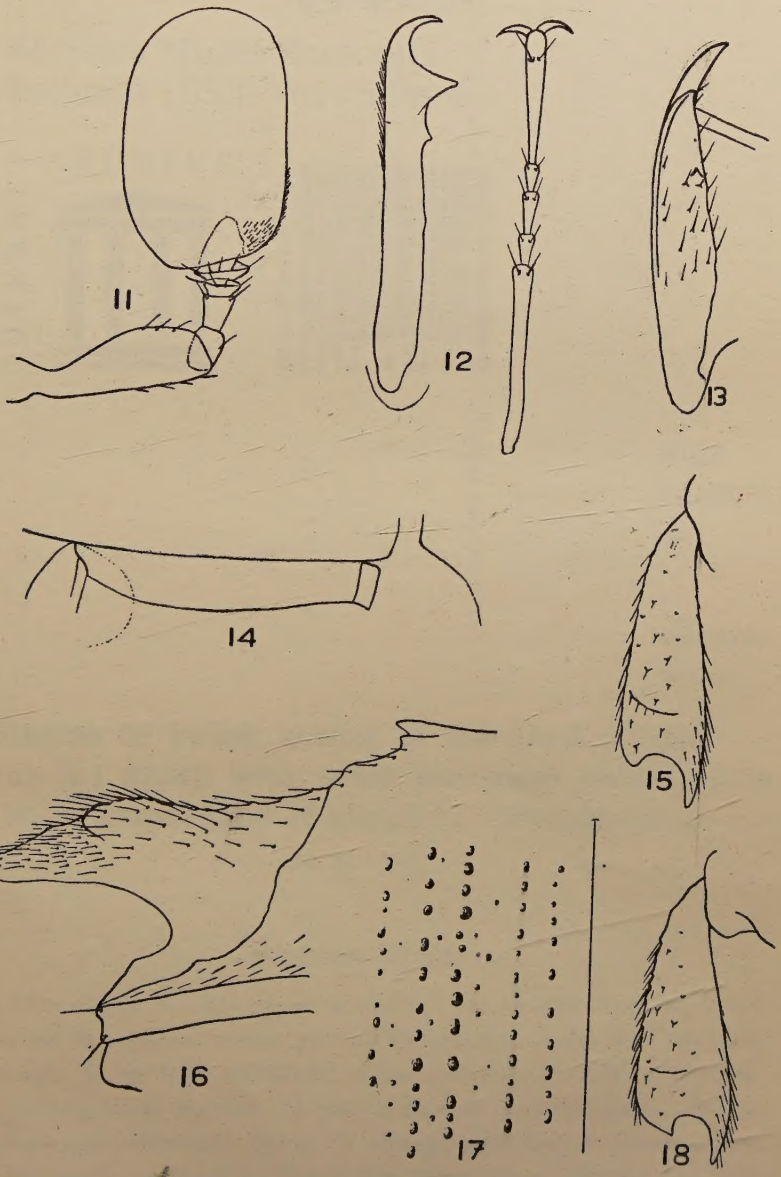

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